

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A recombinant C1 inhibitor which is characterised in that its plasma circulatory half-life has been changed by modification of an O-linked carbohydrate, wherein the modification has been carried out by *in vitro* incubation with an enzyme preparation comprising one or more O-linked carbohydrate modifying enzymes or *in vivo* by co-expression of the C1 inhibitor with one or more O-linked carbohydrate modifying enzymes in a cell line or a non-human transgenic animal.

2. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that its plasma circulatory half-life has been extended compared to the half-life of an unmodified C1 inhibitor.

3. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that its plasma circulatory half-life has been reduced compared to the half-life of an unmodified C1 inhibitor.

4. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that the plasma circulatory half-life of the modified inhibitor has decreased as compared to, [[with]] or increased to at least 1.5, 2, 3 or 4 times the value of, the half-life of the the[[-]] unmodified inhibitor.

5. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that the modification comprises sialylation of the O-linked carbohydrate or the removal of one or more non-sialylated O-linked carbohydrates.

6. (Currently Amended) A recombinant C1 inhibitor according to claim 5, which is characterised in that the non-sialylated O-linked carbohydrate is galactose or Gal(β 1-3)GalNAc.

7. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which ~~claim 1~~ is characterised in that the O-linked carbohydrate is modified by incubation with an enzyme preparation which comprises one or more O-linked carbohydrate modifying enzymes.

8. (Currently Amended) A recombinant C1 inhibitor according to claim 7, which is characterised in that the enzyme preparation comprises one or more sialyltransferases, galactosidases or endo-acetyl-galactosaminidases.

9. (Currently Amended) A recombinant C1 inhibitor according to claim 8, which is characterised in that the enzyme preparation comprises sialyltransferases ST3Gal III and ST3Gal I, or endo- α -N-acetyl-galactosaminidase.

10. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that the modification is an *in vitro* modification.

11. (Currently Amended) A recombinant C1 inhibitor according to claim 1, which is characterised in that the C1 inhibitor is human C1 inhibitor.

12. (Canceled)

13. (Currently Amended) A pharmaceutical composition comprising a recombinant C1 inhibitor according to claim 1.

14-15. (Canceled)

16. (Currently Amended) A method for extending the blood circulatory half-life of a glycoprotein or of a glycoprotein comprising compound, wherein the method comprises removing one or more non-sialylated O-linked carbohydrates from the glycoprotein, ~~wherein the one or more non-sialylated O-linked carbohydrate is removed by~~ in vitro incubation with an enzyme preparation comprising one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates or *in vivo* by co-expression of the glycoprotein with one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates in a cell line or a non-human transgenic animal.

17. (Currently Amended) The method according to claim 16, wherein the non-sialylated carbohydrate is galactose or Gal(β 1-3)GalNAc.

18. (Currently Amended) The method according to claim 16, wherein the one or more non-sialylated O-linked carbohydrates is-are removed by *in vitro* incubation with an enzyme preparation comprising one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates.

19. (Original) The method according to claim 18, wherein the enzyme preparation comprises galactosidase or endo-acetylgalactosaminidase.

20. (Currently Amended) The method according to claim 18, wherein the enzyme preparation comprises one or more recombinantly produced enzymes.

21. (Currently Amended) The method according to claim 16, wherein the one or more non-sialylated O-linked carbohydrates is-are removed *in vivo* by co-expression of the glycoprotein with a nucleic acid encoding a galactosidase or an endo-acetylgalactosaminidase in a cell line or in a non-human transgenic animal.

22. (Currently Amended) The method according to claim 16, wherein the glycoprotein is a C1 inhibitor.